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ABSTRACT

To measure the sex role attitudes of Army personnel, an initial set of 174 items was developed. These items were administered to 721 soldiers at three Army installations; the sample consisted of 540 men and 181 women--401 of these were officers and 320 were enlisted personnel. Factor analysis of these 174 items indicated one strong factor--traditional versus contemporary orientation toward women. Thirty-seven items loaded highly on this factor. From these 37 items, eighteen were selected to form the rating scale. In order to construct a second, shorter, attitude scale, seven of the 18 items were selected, based upon high item reliability (.70 to .80) and unambiguity. Reliabilities of the 18-item and 7-item scales were .88 and .78, respectively. Validity of the measures was supported by their correlations with other variables which would be expected to be related: sex, education, political beliefs, and parent and peer attitudes. Results of the field test with 721 soldiers indicated that women (as compared with men) and officers (as compared with enlisted personnel) held more contemporary attitudes toward women in the Army. (The 37-item scale is appended; the 18-item and 7-item versions are also listed). (GDC)

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Research Memorandum 76-3

A PRELIMINARY VERSION OF A SCALE TO MEASURE SEX-ROLE ATTITUDES IN THE ARMY

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CAREER DEVELOPMENT AND SOLDIER PRODUCTIVITY TECHNICAL AREA

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A PRELIMINARY VERSION OF A SCALE TO MEASURE SEX-ROLE ATTITUDES IN THE ARMY

INTRODUCTION

The Army is today using more women in more different kinds of jobs than it has at any time since the end of World War II, and most expectations are that this trend will continue.[1] In view of this fact, it seemed desirable to find out how soldiers (both male and female) are reacting to this development, what factors account for differences that exist, and to what extent soldiers' attitudes and behavior in this regard are likely to change in the years ahead. The present report describes preliminary work toward the construction of the basic sex-role attitude scale (both a long and a short form) to be used in this research.

The project began with a review of the relevant literature and a series of discussions between members of the project staff and a team of outside consultants.[2] The tangible outcome of these discussions was a series of "working papers" setting forth the team's current thinking as to (a) what this sex-role attitude was that was going to be measured and (b) what form it was likely to take (attitudinally) in an Army population. In particular, the team sought to identify as many different attitude dimensions as possible--the assumption being that, initially, it was better to take into account too many dimensions (and then find some to be unnecessary) than too few (and later find that something important had been overlooked). The general procedure was to hypothesize a set of attitude dimensions, construct a set of items to tap these dimensions, observe the performance of these items in a number of Army subpopulations, and then revise, eliminate, or substitute, as indicated by the results of the observation. Eventually, a set of 174 items was identified that seemed useful for measuring soldiers' sex-role attitudes along a number of dimensions.[3]

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[1] This point was documented and discussed in Savell, Woelfel, and Collins, Attitudes Concerning Job Appropriateness for Women in the Army, ARI Research Memorandum 75-3, June 1975. Additional information is presented in "Male and female soldiers' beliefs about the 'appropriateness' of various jobs for women in the Army," prepared for the 1976 annual meeting of The Southern Sociological Society at Miami, Florida, by J. M. Savell, J. C. Woelfel, B. E. Collins, and P. M. Bentler.

[2] We are indebted to the following persons who served in this role: Beth Coye, Arlene Daniels, Diane Dickey, Linda Fidell, Nancy Goldman, Charles Moskos, Jane Prather, Leo Reeder, Shirley Sangri, David Sears, Exequiel Sevilla, Jr., Shirley Star, and Martha White. It should be noted, however, that not all of these individuals (nor indeed all members of the research team itself) agreed on all matters pertaining to the development of the scale.

[3] This version of the instrument was developed by Barry Collins and Peter Bentler.

In January 1974 these items were administered to a combined sample of some 800 soldiers at three US Army installations (Fort Dix, New Jersey; Fort Lewis, Washington; and Fort Meade, Maryland); and from this group, 721 usable questionnaires were obtained. The sample included 540 men (75%) and 181 women (25%), 401 officers (56%) and 320 enlisted (44%). The sample design was constructed so as to include both white and non-white respondents and to include installations that varied in type as well as geographical dispersion. At each installation the instructions were that respondents were to be random samples from the specified sub-populations, selected on the basis of the final digits of their social security numbers. And while we were unable to determine the extent to which the local action officers departed from these instructions, conversations with these action officers indicated that such departures (if any) were minor.

CONSTRUCTION OF THE SCALES

In the process of developing an attitude scale the researcher makes three decisions: (1) how many items to include in the scale, (2) which items to select among those available for inclusion, and (3) how individual item scores are to be combined so that the respondent is given a score on the scale as a whole. In the present case we decided to create two scales, a long form and a short form, and in the discussion below we describe the decision making that went into each of the two forms.

EIGHTEEN-ITEM SCALE

Number of items. It is generally recognized that increasing the number of items in a scale increases the scale's reliability.[4] Once the number of items reaches 18 to 20, however, the increase in reliability declines. Since we wanted a scale that would make minimal time demands on the individuals to whom the scale would be administered, we decided to develop a scale with about 20 items--a scale, in other words, that was as short as possible and still have high reliability.

Selection of items. On the basis of a factor analysis of the entire set of 174 items (which included demographic, personal-history, and other social-attitude items as well as items pertaining specifically to sex-role attitudes), we identified 37 that showed relatively high loadings on the strongest single factor. Appendix A presents the 37 items and explains how they are scored. These 37 items were intercorrelated, and the matrix of the intercorrelations, with unities in the diagonals, was subjected to a principal components factor analysis. Table 1 presents the eigenvalues and the percent variance explained for each of the first 20 factors.

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[4] For a discussion of the relationship between scale reliability and the number of items in the scale, see Nunnally, Psychometric Theory, 1967 (especially p. 22).

Table 1

EIGENVALUES AND PERCENT VARIANCE EXPLAINED PER FACTOR FOR THE FIRST 20 FACTORS IN THE 37-VARIABLE FACTOR STRUCTURE

Factor	Eigenvalue	Percent Variance
I	7.0763	19.13
II	2.5727	6.95
III	1.9948	5.39
IV	1.7634	4.77
V	1.4538	3.93
VI	1.1820	3.19
VII	1.1624	3.14
VIII	1.1131	3.01
IX	1.0499	2.84
X	1.0144	2.74
XI	.9382	2.54
XII	.8762	2.37
XIII	.8680	2.35
XIV	.8259	2.23
XV	.8027	2.17
XVI	.7814	2.11
XVII	.7441	2.01
XVIII	.7287	1.97
XIX	.7146	1.93
XX	.7071	1.91

Inspection of the table shows a relatively strong single factor (Factor I), and Cattell's scree test (Cattell, 1966) finds this to be the only factor that is significant. The 37 factor loadings for this factor and for factors II and III are presented in Table 2. Examination of the pattern of loadings on Factor I suggests what may be termed a traditional/contemporary orientation toward women. For example, there is a relatively high positive loading of item 5 ("women should not expect to have all the privileges and responsibilities that men have") on this factor, where higher scores (indicating disagreement) reflect a more contemporary orientation. Similarly, there is a relatively high negative loading

Table 2

FACTOR LOADINGS FOR FIRST THREE FACTORS
FROM 37-VARIABLE FACTOR STRUCTURE

Item	Factor I	Factor II	Factor III
1	.468	-.161	.002
2	.531	.207	-.103
3	-.280	-.258	.245
4	.465	.128	.259
5	.602	-.000	.209
6	.601	.026	-.188
7	-.515	.053	.370
8	-.458	.183	.338
9	-.165	.064	.186
10	.369	.196	.296
11	-.154	-.403	.126
12	.658	-.016	.084
13	.378	.356	.042
14	.627	.349	.016
15	-.090	.280	-.219
16	.033	.514	.073
17	.550	.096	.219
18	.448	.079	.096
19	.535	.260	-.167
20	-.535	.411	.052
21	.154	-.171	-.126
22	.158	-.225	-.064
23	-.483	.364	.339
24	.217	.144	-.609
25	-.302	.446	-.243
26	.652	.181	-.009
27	-.334	.092	.075
28	.469	.459	-.109
29	-.070	-.406	-.001
30	.577	.034	.264
31	-.582	.150	-.019
32	-.610	.023	-.088
33	.382	-.499	-.064
34	-.043	-.118	-.431
35	-.490	.158	-.257
36	-.462	.411	-.133
37	-.118	-.080	-.552

for item 20 ("women would make good front-line soldiers if they were trained properly"),[5] where higher scores (again indicating disagreement) reflect a more traditional orientation. Finally, on items whose wording does not suggest that sex-role attitude is being measured--e.g., item 16 ("I don't like the Army because of its restrictiveness")--the factor loading is approximately zero. Our interpretation then was that respondents who score high on this factor tend to believe that women should have the same privileges and responsibilities than men have. With this interpretation of Factor I, we proceeded to select 18 items that loaded maximally on this factor. Close examination of these items, however, suggested that two of them (17 and 19) were ambiguous; and we therefore substituted for them the two items with the next highest loadings. The 18 items selected in this way were items 1, 2, 4, 5, 6, 7, 8, 12, 14, 20, 23, 26, 28, 30, 31, 32, 35, and 36 (see Appendix A). These 18 items were subjected to a principal components factor analysis, again using unities in the diagonal. Table 3 presents the eigenvalues and percent variance explained for each factor. Once again, inspection of the table shows a relatively strong single factor (Factor I); and again Cattell's scree test finds this to be the only factor that is significant. The 18 factor loadings for this factor and for factors II and III are presented in Table 4. Again, examination of the pattern of loadings on Factor I suggests that this factor can be described as a traditional-versus-contemporary orientation toward women. Loadings on Factor I and Factor II are shown graphically in Figure 1 as two distinct clusters of items. One cluster consists of ten items (1, 2, 4, 5, 6, 12, 14, 26, 28, and 30) that load positively on Factor I. High scores on these items again appear to reflect a more contemporary view of the role of women, while low scores appear to reflect a more traditional view. The other cluster consists of eight items (7, 8, 20, 23, 31, 32, 35, and 36) that load negatively on Factor I. High scores on these items appear to reflect a more traditional view of the role of women, while low scores appear to reflect a more contemporary view. In summary, the results of our factor analysis of these 18 items suggest that a single factor accounts to a considerable degree for responses to these items. This factor we have referred to here as a traditional-versus-contemporary view of women.

Procedure for combining items. As indicated earlier, some of the items were keyed in a traditional direction while others were keyed in a contemporary direction. To make it easier to interpret individual item scores, we reversed the keying for the eight items that had been keyed in the traditional direction (i.e., those that loaded negatively on Factor I). Thus, all 18 items were now keyed in the same direction, with higher scores indicating a more contemporary orientation and lower scores indicating a more traditional orientation. After this reversal had been

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[5] This is one of several items we think should be reworded.

Table 3

EIGENVALUES AND PERCENT VARIANCE EXPLAINED PER FACTOR FOR 18-VARIABLE FACTOR STRUCTURE

Factor	Eigenvalue	Percent Variance
I	5.7412	31.89
II	1.5478	8.60
III	1.2539	6.97
IV	.9590	5.33
V	.8644	4.80
VI	.7962	4.42
VII	.7758	4.31
VIII	.7420	4.12
IX	.6791	3.77
X	.6256	3.48
XI	.5934	3.30
XII	.5755	3.20
XIII	.5393	3.00
XIV	.5373	2.99
XV	.4840	2.69
XVI	.4703	2.61
XVII	.4156	2.31
XVIII	.3996	2.22

Table 4

FACTOR LOADINGS FOR FIRST THREE FACTORS FROM 18-VARIABLE FACTOR STRUCTURE

Item	Factor I	Factor II	Factor III
1	.4840	-.0632	.1578
2	.5270	.2568	.3003
4	.4614	.3997	-.2016
5	.6146	.2463	-.2502
6	.6251	-.1106	.2686
7	-.5522	.2326	-.4340
8	-.4762	.3841	-.2941
12	.6527	.1122	.0229
14	.6197	.2441	.2576
20	-.5770	.4550	.2482
23	-.5600	.5535	-.0013
26	.6553	.2222	.1781
28	.4704	.3671	.3152
30	.5717	.2746	-.3262
31	-.6214	.1091	.2167
32	-.6190	-.0812	.2732
35	-.5327	-.0390	.3880
36	-.5300	.3552	.2557

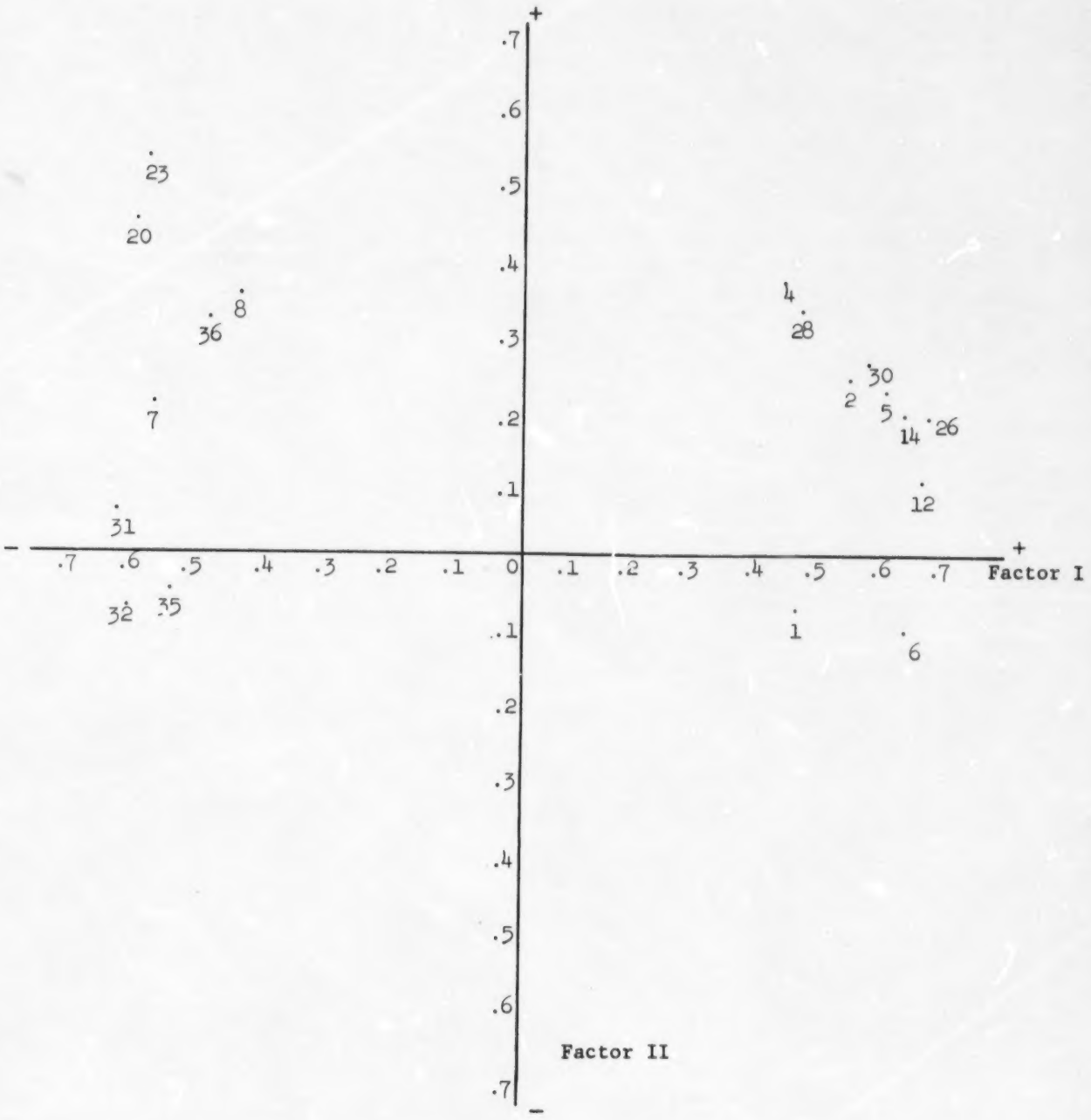

Figure 1. Plot of first two factors from 18-variable factor structure

completed, we re-factored the entire set of 18 items; and the Factor I loadings obtained for each of the items, plus the eigenvalue and the percent variance explained, are shown in Table 5.

The procedure we decided on for combining individual item scores involved three steps. The first step was to standardize the respondent's item scores (i.e., convert them to z scores) and was simply a strategy for providing comparable units of measure in a situation where different items (because they had different numbers of response alternatives) had different ranges of possible scores. The second step was to multiply each z score by the appropriate factor loading on Factor I (see Table 5) and was a strategy for weighting the scores according to their ability to predict Factor I. The third step was simply to sum the resulting scores (i.e., the weighted z scores) to yield a score on the scale as a whole. For this scale, as for the individual items that went into it, a high score reflects what we have termed a more contemporary orientation toward women while a low score reflects a more traditional orientation. The reliability and validity of this scale will be discussed after we have described the development of a short (seven-item) form of this scale.

Table 5

FACTOR LOADINGS USED TO WEIGHT ITEMS FOR LONG FORM SCALE

Item	Loading on Factor I
1	.4877
2	.5251
4	.4500
5	.6133
6	.6231
7	.5587
8	.4834
12	.6495
14	.6101
20	.5859
23	.5632
26	.6550
28	.4682
30	.5632
31	.6245
32	.6187
35	.5310
36	.4901
Eigenvalue	5.7412
Percent Variance Explained	31.89

SEVEN-ITEM SCALE

Number of items. As indicated previously, we wanted to develop a scale that had high reliability while making minimal demands on the individual soldier to whom the scale would be administered. With this goal, we developed the 18-item scale described above. We had reason to think, however, that for some purposes an 18-item scale (with its supporting demographics, etc.) would still be too long and that an even shorter scale would be desirable. A series of discussions led to the decision to develop a subscale of five to seven items from the 18-item scale already developed.

Selection of items. Selection of items for the subscale was based on two criteria: (a) the total set of items would have a reliability coefficient in the .70-to-.80 range when measured by Cronbach's internal consistency method, and (b) the individual items would be relatively unambiguous. Application of these criteria led to the selection of the following seven items: 6, 7, 14, 20, 23, 26, and 32. Again, the intercorrelation matrix of these items was factor analyzed. Table 6 presents the factor loadings, eigenvalues, and percent variance explained for each factor. Inspection of the table shows a strong single factor (Factor I), and again Cattell's scree test suggests this to be the only factor that is significant. As before, the pattern of these loadings can be described as a traditional-versus-contemporary orientation toward women. Loadings on Factor I and Factor II are shown graphically in Figure 2, again as two distinct clusters. One cluster consists of three items (6, 14, and 26) that load negatively on Factor I. The other cluster consists of four items (7, 20, 23, and 32) that load positively on Factor I. In summary, then, the result of factor analyzing the set of seven items indicates (as was true for the 37-item and 18-item sets) that one major dimension underlies the soldiers' responses to the items used. This dimension we have termed the traditional-versus-contemporary dimension of attitudes toward women in the Army.

Procedure for combining items. As before, keying was reversed for the four items (7, 20, 23, and 32) that loaded positively on Factor I so that for each of the seven items a high score would reflect a more contemporary position. The intercorrelation matrix of these items was then factor analyzed; and Table 7 presents the seven factor loadings for Factor I, plus the eigenvalues and percent variance explained. The same procedure was used in combining items as with the 18-item scale. The seven item scores were standardized and weighted by the appropriate loading on Factor I (see Table 7); and the seven weighted standardized scores were summed to yield a score on the scale as a whole. Again, higher scores are taken as indicating a more contemporary view about the role of women in the Army while lower scores are taken as indicating a more traditional view.

Table 6

FACTOR LOADINGS, EIGENVALUES, AND PERCENT VARIANCE EXPLAINED
FROM 7-VARIABLE FACTOR STRUCTURE

Item	Factors						
	I	II	III	IV	V	VI	VII
6	-.6677	.0996	.2897	.6545	.1220	-.0365	.1258
7	.6515	-.0104	-.5376	.2951	.4057	-.1021	-.1561
14	-.6602	.4854	-.0265	-.1448	.2936	.4210	-.0282
20	.6412	.5267	.2231	.1726	-.3173	-.0992	-.3484
23	.6682	.5718	.0991	.0043	-.0133	.1399	.4437
26	-.6698	.4401	-.1215	-.2126	.1079	-.5335	.0379
32	.6310	-.0496	.5830	-.1693	.4685	-.1063	.0008
Eigenvalue	3.0105	1.0462	.7880	.6401	.5977	.5144	.4003
Percent Variance Explained	43.01	14.95	11.26	9.14	8.54	7.40	6.19

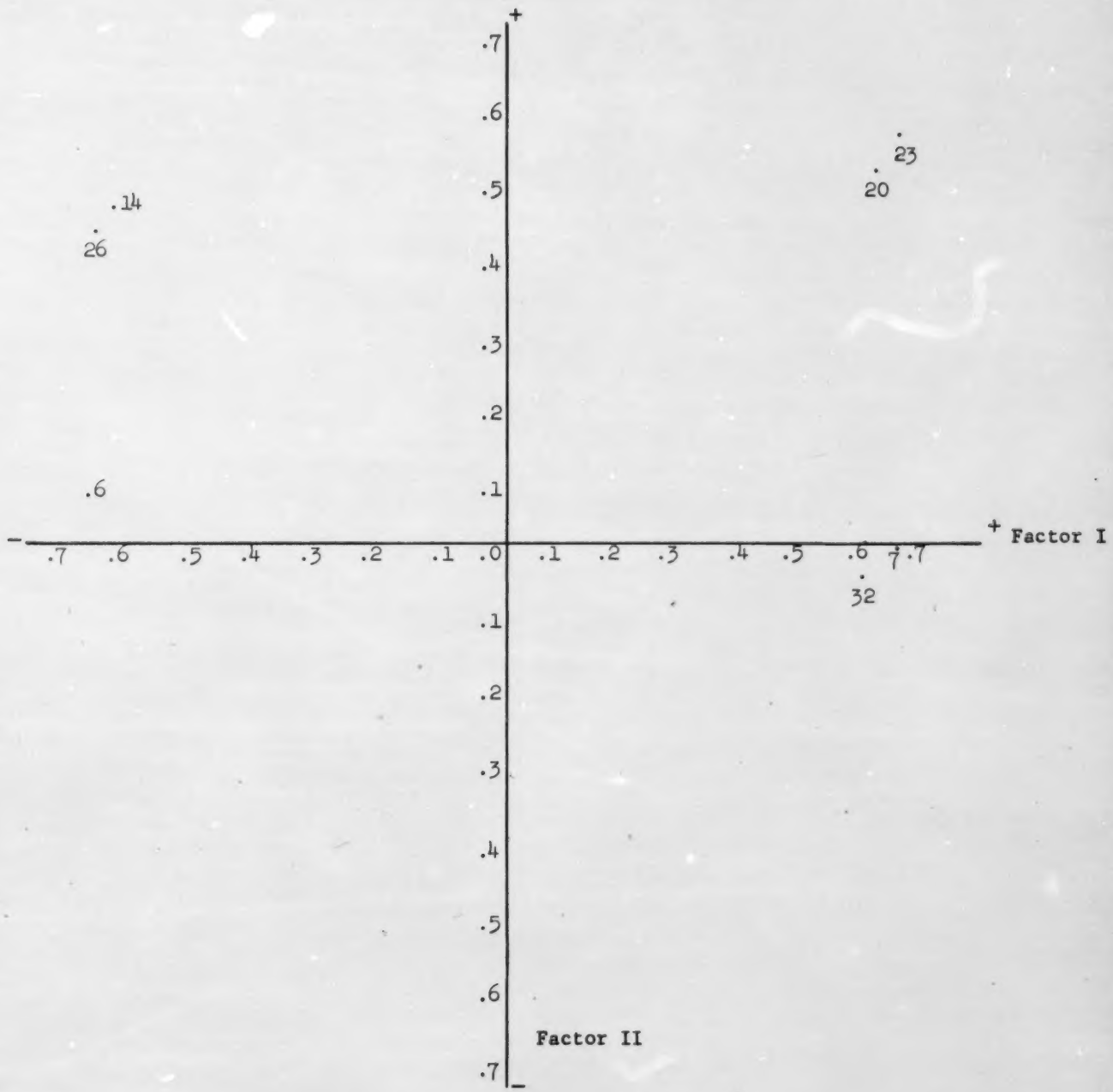

Figure 2. Plot of first two factors from 7-variable factor structure

Table 7

FACTOR LOADINGS USED TO WEIGHT ITEMS FOR SHORT FORM SCALE

Items	Loading on Factor I
6	.6678
7	.6469
14	.6630
20	.6451
23	.6619
26	.6713
32	.6330
Eigenvalue	3.0095
Percent Variance Explained	42.99

RELIABILITY AND VALIDITY

Reliability of each of the two scales was measured with Cronbach's alpha, and the coefficients obtained were .88 for the 18-item scale and .78 for the 7-item scale. The question of whether the two scales measure what they are intended to measure was assessed by examining these scales for evidence of face and construct validity. Examination of the wording of the items (see the starred items in Appendix A) suggests strongly that the primary dimension being measured is indeed a traditional-versus-contemporary orientation toward women in the Army. For example, item 5 asserts that women should not expect to have all the privileges and responsibilities that men have, and item 7 asks about the role women should play in the Army. It should be noted also (see Figures 1 and 2) that for each scale the individual items load heavily and in a similar fashion on Factor I, the factor that empirically defines what the scale is primarily measuring.

The construct validity of the two scales was assessed by correlating the scales with certain variables which, according to prior research and/or theory, should be related to them. One such variable is sex. Previous research has shown that women tend to be more contemporary in their sex-role attitudes than men (Coye et al., 1973; Erskine, 1971; Ferree, 1974; Haavio-Mannila, 1972; McCune, 1970; Peters et al., 1974; and Rosenkrantz et al., 1968). Another such variable is education. Previous research has shown that those with more years of formal education tend to be more

contemporary than those with fewer years of formal education (Erskine, 1971; Ferree, 1974; Lipman-Blumen, 1972; Mason and Bumpass, forthcoming; and Yankelovich, 1974). A variable which on theoretical grounds should be related to sex-role attitude is the individual's perception of himself as conservative or liberal in general political outlook, because discussions concerning the role of women have frequently involved consideration of the "rights" of women; and this topic is, at least in part, political.

For one of the items the respondent was asked: "What is your political belief?" and was presented with five response alternatives (conservative, moderate, liberal, radical, and other). What we expect here is that those who respond in the more contemporary direction on the sex-role attitude scales will tend to describe themselves as more liberal on the political attitude item than will those who respond to the sex-role attitude scales in the more traditional direction.

Finally, since previous research has shown that people tend to have attitudes similar to those of their parents and close friends (see for example Jennings and Langton, 1969; McCloskey and Dahlgren, 1959; Rose, 1957; and Woelfel, forthcoming), it is reasonable to suppose that there will be a positive relationship between our respondents' sex-role attitudes and the attitudes held by their parents and close friends. We had no direct measure of the attitudes held by the family and friends of our respondents, but did have a measure of the sex-role attitude that our respondents attributed to these persons. The respondent was presented with two different statements about the proper role of women in society, one statement reflecting a traditional point of view and the other statement reflecting a contemporary point of view (see item #1 in Appendix A). The respondents were then asked to say which of the two statements they thought each of several people would agree with most--their mother, father, closest friend of the same sex, and closest friend of the opposite sex. We expected to find a positive relationship between the respondent's own sex-role attitude (as measured by the two scales described in this report) and the attitude the respondent attributed to each of these persons. Table 8 presents the zero-order correlations between both the 18-item and the 7-item scales and the seven variables to which these scales were assumed to be related. As can be seen, the correlations are all significant and in the predicted direction; and this fact, plus the apparent face validity of the two scales, supports the belief that the scales are capable of providing valid measures of traditional/contemporary orientation toward women in the Army.

SELECTED SCALE PROPERTIES

Table 9 presents the mean, standard deviation, and observed range of scores for the 18-item and the 7-item scales, both overall and separately for men, women, officers, and enlisted. On both scales women score higher than men and officers score higher than enlisted. The zero-order correlation between the two scales, based on 670 cases, is .92.

Table 8

VALIDITY CORRELATION MATRIX

Variable	Scale: Long Form	Scale: Short Form
Sex[a]	.41***	.37***
Education[b]	.16***	.10**
Political L-C score[c]	.21***	.17***
Mother attitude	.17***	.13***
Father attitude	.18***	.14***
Peer, same sex attitude	.39***	.32***
Peer, opposite sex attitude	.10***	.16***

Note. N ranges between 661 and 692.

[a]Sex is coded 1-male 2-female.

[b]Education is coded so that low scores reflect low education, high scores higher education.

[c]Low scores indicate a conservative political position, higher scores a more liberal position.

** $p < .01$.
*** $p < .001$.

Table 9

SELECTED SCALE PROPERTIES

Scale Form	Mean	SD	Range
Total Sample (N = 721)			
Long	-.001	5.750	-17.545 to 14.061
Short	-.017	2.997	-8.915 to 7.301
Men (N = 540)			
Long	-1.349	5.400	-17.545 to 14.061
Short	-.660	2.869	-8.915 to 7.301
Women (N = 181)			
Long	4.026	4.796	-13.294 to 14.061
Short	1.883	2.515	-7.763 to 7.301
Officers (N = 401)			
Long	.413	5.953	-17.189 to 14.061
Short	.077	3.038	-8.646 to 7.301
Enlisted (N = 320)			
Long	-.544	5.441	-17.545 to 14.061
Short	-.138	2.949	-8.915 to 7.301

SUGGESTIONS FOR USE

REWORDING

As indicated earlier, this report describes preliminary research on a scale intended to measure sex-role attitudes in the Army. Such a scale has been developed in both a long and a short form. We believe, however, that the wording of some of the items should be improved. With this in mind we changed the wording slightly on the items making up the 7-item version of the scale, and we are currently engaged in a research effort to determine the reliability and validity of the 7-item scale with this modification. The modified version of this scale is presented in Appendix B, and the reader can identify the changes made by comparing these items with the corresponding ones in Appendix A. We believe that the changes indicated will not reduce the reliability or the validity of the scale; those who may wish to use the scale before the additional analyses have been completed should use it in its modified form. In any event, the relevant data on the modified form of the 7-item scale will be presented in a later report.

FORMAT

As we have no data regarding the effect of different sequences of items in the two scales, the location of items within the scales is left to the discretion of the individual user.

SUMMARY

A preliminary version of a short and a long form of a scale measuring sex-role attitudes in the Army has been developed, and each form appears to meet basic criteria for reliability and validity. Certain changes in item wording are indicated, however, and research is in progress to determine the reliability and validity of a slightly modified version of the short form.

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APPENDIX

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APPENDIX A POOL OF ITEMS USED FOR DEVELOPMENT OF SCALES

*1. Here are two statements about men and women:

Statement 1: Under ordinary circumstances, women belong in the home, caring for children and carrying out domestic duties, whereas men should be responsible for the financial support of the family.

Statement 2: Relationships between men and women are ideally equal and husbands and wives should share domestic, childrearing and financial responsibilities.

	Statement	
Circle the number of the statement you agree with most.	1	2

For items presented in the following format the respondent was told that the letters stood for the following response alternatives: strongly agree, agree, disagree, and strongly disagree. These response alternatives were scored 1-4 in that order.

*2. Men have more common sense than women . . . . . SA A D SD

3. Women are generally logical when it comes to decision making . . . . . SA A D SD

*4. A women should choose between a career and a family . . . . . SA A D SD

*5. Women should not expect to have all the privileges and responsibilities that men have . . . . . SA A D SD

*6. The Army's role is best carried out

a. by men only
b. mostly by men with some women in support roles
c. mostly by men with some women in important roles
d. Equally by men and women
e. mostly by women

*7. If a greater number of qualified women were placed in command positions the effectiveness of the Army

a. would increase
b. would not change
c. would get worse

*8. In my specific job I would prefer my boss to be

a. a woman
b. it makes no difference
c. a man

9. If I were working alongside a woman and we were doing the same job,

a. I would like it
b. I wouldn't care
c. I would dislike it

10. Women's mistakes on the job are more excusable than men's . . . . . SA A D SD

11. The Army develops qualities that are good for both men and women . . . . . SA A D SD

*12. Of all places, the Army should remain a masculine stronghold . . . . . SA A D SD

13. Many women in the Army are lesbians . . . . . SA A D SD

*14. Women commanders will not generate respect among their subordinates . . . . . SA A D SD

15. Many men in the Army are incompetent . . . . . SA A D SD

16. I don't like the Army because of its restrictiveness . SA A D SD

17. I feel that there is no reason for the Army to change any of its policies regarding women . . . . . SA A D SD

18. What I like about the Army is its all-male atmosphere . SA A D SD

19. As long as women have no combat experience, they should not be considered for important command positions . . . . . SA A D SD

*20. Women would make good front-line soldiers if they were trained properly . . . . . SA A D SD

21. When men fight in combat units, they

a. become better people
b. stay the same
c. are badly affected

22. Compared to men, women are naturally

a. less capable of violence
b. the same
c. more capable of violence

*23. If women were assigned to combat units, the Army would

a. become more effective
b. stay the same
c. become less effective

24. Compared to other women, most women in the Army

a. have looser morals
b. are the same
c. have higher moral standards

25. If men are drafted into the Army, women should be drafted too . . . . . SA A D SD

*26. Women don't make good bosses at work . . . . . SA A D SD

27. Working women set a good example of competence for their children . . . . . SA A D SD

*28. Most women who join the Army couldn't get a husband on the outside . . . . . SA A D SD

29. Most men who make the Army a career are capable of getting an equally good job outside the Army . . . . . SA A D SD

*30. Women shouldn't work at rough, competitive jobs . . . . SA A D SD

*31. Women could work in the "backwoods" as easily as men . SA A D SD

*32. Women should be included in space missions . . . . . SA A D SD

33. Women should not be expected to serve in military combat on the front line . . . . . SA A D SD

Some jobs are more appropriate than others for women in the Army. You may feel that all jobs are OK for women in the Army, or you may feel that no jobs are OK for women in the Army.

34. Cook . . . . . OK NOT OK

*35. Diesel Mechanic . . . . . OK NOT OK

* 36. Rifle-Carrying Infantry Foot-Soldier . . . . . OK NOT OK

37. Social Worker . . . . . OK NOT OK

Note. Starred items are those used in the 18-item scale.

APPENDIX B RECOMMENDED VERSION OF THE 7-ITEM SCALE

6. The Army's mission is best carried out:

a) by men only
b) mostly by men with some women in support roles
c) mostly by men with some women in combat as well as support roles
d) equally by men and women
e) mostly by women

7. If a greater number of women were placed in command positions, the effectiveness of the Army:

a) would increase
b) would decrease
c) would not change

14. Women commanders will not get much respect from the men in their units.

a) Strongly agree
b) Somewhat agree
c) No opinion at all
d) Somewhat disagree
e) Strongly disagree

20. Women would make just as good front-line soldiers as men if they were given the same training.

a) Strongly agree
b) Somewhat agree
c) No opinion at all
d) Somewhat disagree
e) Strongly disagree

23. If women were assigned to combat units, the Army would:

a) become more effective
b) remain just as effective
c) become less effective

26. Women don't make good bosses at work.

a) Strongly agree
b) Somewhat agree
c) No opinion at all
d) Somewhat disagree
e) Strongly disagree

31. Women should be included in space missions.

a) Strongly agree
b) Somewhat agree
c) No opinion at all
d) Somewhat disagree
e) Strongly disagree